customer needs. It is worth reviewing the SRP web site, which details its carrier offerings and its "reach:"[92]

Wireline services

> SRP Telecom offers carriers dark fiber – the fundamental ingredient for broadband networks that can support Synchronous Optical Network (SONET), Wave Division Multiplexing (WDM), Ethernet, VOIP, and any foreseeable new optical technology.
>
> We operate the largest and most geographically pervasive competitive fiber network in the Phoenix metropolitan area. We are the market's densest metropolitan area network and one of the densest in the nation.
>
> Unlike any other fiber network in our marketplace, SRP Telecom provides all of the following:
>
> - **Reach**. Our fiber spans a 2,900 square-mile electric service territory, spanning all or part of 15 cities. We literally have fiber from one end of metropolitan Phoenix to the other.
> - **Flexibility**. With our 950 route miles and 35,000 strand miles (numbers that continually grow), we create responsive solutions to specific network requirements, often with multiple route options.
> - **Range**. While we prefer ringed topologies for maintenance quality reasons, we can also provide point-to-point solutions, or extensions to your existing rings. We've delivered solutions ranging from a 150-plus route mile, multinode metropolitan area private dark fiber network, to a single 500 foot data center building entrance.

Despite the clear options SRP Telecom provides, the *Broadview CLECs* (which includes XO) go to great lengths to demonstrate that the SRP Telecom network is not a viable option for XO, because allegedly: (1) these facilities are on electrical system transmission routes-not distribution routes; (2) XO has limited access; (3) only trained power technicians can add splices, maintain and repair facilities; (4) XO cannot easily install drops to customers, and (5) it is XO's understanding that SRP does not offer "Quality of Service" guarantees. While Qwest does not doubt that XO would have to address certain issues in utilizing the SRP network, these issues cannot be insurmountable, and such issues would arise with the connection of any alternative

[92] *See*: http://www.srpnet.com/telecom/wireline.aspx.

fiber network. Qwest believes that XO greatly overstates these difficulties.[93] For example, XO claims that SRP provides no service guarantees, but that is certainly not the picture painted on SRP's web site, which states:

> Given our vested interest in the network, our maintenance and security standards are optimum. As an SRP Telecom customer, you can be assured:
>
> - only SRP field operations personnel may touch our fiber
> - maintenance and security procedures and obligations are thoroughly documented in our master agreement, and can be tailored for each customer
> - we thoroughly test – end-to-end – each segment, as well as the total system. Test results are documented in a comprehensive acceptance package
> - our emergency response levels are clearly defined, ensuring optimum time-to-restoration, status notification, fiber system attenuation and other performance dimensions[94]

In reality, none of the issues raised by XO -- to the extent they are valid -- could not be overcome, and in fact these types of issues are resolved on a routine basis when carriers connect networks or use alternative fiber facilities. In essence, what XO is saying is not that it *cannot* utilize the SRP network, but that it would *prefer* to continue to rely on the Qwest network -- especially when it can obtain UNEs at rock-bottom prices. It is also saying that other networks are not a substitute for the Qwest network because these networks *are not* the Qwest network. This is not the correct standard, as no other networks will be ever be identical to the Qwest network, nor should they be. Forbearance should not be denied for the convenience of CLECs, as the Commission's actions should focus on fostering competition, not protecting competitors.

It is interesting that the Broadview CLECs, after declaring that alternative fiber networks are of little use, admit that XO plans to use the AGL network in the Phoenix MSA. However, after admitting this, they then complain about all the shortcomings of the AGL network, and how

---

[93] The key question is not what difficulties XO might have with the SRP network, the question is whether an efficient carrier can make use of the SRP network

[94] *See*: http://www.srpnet.com/telecom/security.aspx.

it is of "very limited utility."[95] Of course XO's use of the AGL network demonstrates that alternative fiber networks *can* be used as a substitute for the Qwest network, and the Commission should discount claims that such network are not viable.

C. It is Time to Lay to Rest Once and For All the Omaha Myth

PAETEC (and other opposing CLECs) repeats its oft-made claim that the Commission's "predictive judgment" in granting limited forbearance in Omaha has been proven wrong, and that limited forbearance has essentially "killed" competition in Omaha. While PAETEC/McLeod has repeated this mantra often, it is not supported by the evidence.

First, PAETEC/McLeod has not exited from the business market in Omaha, and still serves many business customers in the MSA. Second, as pointed out in ex partes filed in the Qwest 4 MSA proceeding, McLeod's claim that it withdrew from the Omaha residential market *because of forbearance* is suspect at best. On September 12, 2007, McLeod filed an application in Nebraska to "cease providing residential services in certain Qwest wire centers," which encompassed over 50 Qwest wire centers in the state.[96] In its petition, McLeod cites as the cause of its decision "the FCC's adoption of changes to the unbundling obligations of Qwest under Section 251(c)(3) that became effective in 2006" and argues that "McLeodUSA is required to purchase Qwest's QPP to continue providing service to these customers."[97] In other words, McLeod lays the blame for its decision on the Commission's *Triennial Review Remand Order* (issued in 2006), in which the Commission found that local switching was no longer required to be provided as an UNE, which has nothing to do with forbearance from Section 251 requirements with respect to local loops. The fact is, very few CLECs in Omaha, Phoenix or

[95] Broadview CLECs at 48.

[96] Application No. C-3860, filed Sept. 12, 2007.

[97] *Id.*

elsewhere ever served residential customers via the provision of stand-alone UNE loops, and the loss of this option has little impact on residential service.

PAETEC argues that Qwest's wholesale rates in Omaha are unreasonably high due to forbearance. PAETEC claims that Qwest's DS0 prices in the nine Omaha forbearance wire centers increased by "30% over TELRIC cost based rates."[98] Qwest does not concede that TELRIC provides any standard against which commercial rates should be judged. Even so, it is notable that Qwest's current wholesale rate for DS0s is very close to the most recent TELRIC price established by the Nebraska PSC. PAETEC also complains that the DS1 and DS3 wholesale prices available from Qwest in the nine Omaha forbearance wire centers would be priced at the special access rates defined in FCC Tariff No. 1.[99] However, it is significant to note that Qwest has been unable to reach commercial agreements with some CLECs for DS1 services,[100] and that DS1 UNEs are still being purchased by certain CLECs in the nine wire centers where Qwest has been granted forbearance. That is, there are wholesale lines that have not been migrated to special access services. And even if these circuits were migrated to special access, this would not affect the continued availability of below-cost UNE loop prices in the remainder of the Omaha wire centers. Qwest also makes available term and volume discounts, Regional Commitment Plans, and Price Flex Overlays, all of which provide lower prices than the tariffed month-to-month special access rates. Qwest maintains, and the Commission has not found otherwise, that its Special Access pricing is in full compliance with the "just and

---

[98] PAETEC at 40.

[99] *Id.* at 39.

[100] PAETEC/McLeod claims that Qwest refused to negotiate wholesale prices for voice grade, DS1 and DS3 services in the nine Omaha wire centers where forbearance was granted. They argue that Qwest proposed a "take it or leave it" proposal. This is not a proper characterization, as Qwest did negotiate with McLeod, but was unable to reach an agreement.

reasonable" pricing requirements of Section 271. PAETEC also argues that market pressures have not forced Qwest to reduce its special access rates; rather it has increased them.[101] In fact, Qwest's last Special Access pricing increase in Omaha was in August, 2004, well before the Commission issued its *Omaha Forbearance Order* in 2005.

According to PAETEC, the result of forbearance in Omaha is "forcing competitive carriers out of the market" which "means that those carriers' customers will be forced to go back to Qwest, thereby increasing the margin Qwest will realize from directly serving these wire centers."[102] While PAETEC claims that forbearance has led to a dramatic decline in competition, and claims customers have been forced to "move back to Qwest," nothing could be further from the truth. In fact, in the Omaha MSA, Qwest has seen a steep decline in its residential *and* business lines since forbearance was granted, and Qwest now serves significantly fewer access lines in the Omaha MSA than Cox. The fact is, Cox has been a very successful competitor in Omaha, and exerts significant competitive pressure on Qwest, PAETEC and all other providers in Omaha.

Each year, the Nebraska Public Service Commission (PSC) releases a report on telecommunications competition to the Nebraska legislature. These reports show the number of residential and business access lines in the state for each local service provider.[103] This report clearly shows the decline in Qwest lines along with the increase in Cox lines over time. In fact, the data show that Cox total access lines in Nebraska increased from 137,306 in 2004 to 169,148 in 2008. Significantly, much of this growth is in the business market that has been McLeod's focus; Cox's business lines increased from 22,201 in 2004 to 43,804 in 2008 -- a 97% increase.

[101] PAETEC at 37.

[102] *Id.* at 40.

[103] *See*: http://www.psc.state.ne.us/home/NPSC/communication/comm_annualreports.html.

Virtually all of Cox's Nebraska customers are in the Omaha MSA. .Since Qwest serves many areas in Nebraska and Cox is focused on Omaha, it is appropriate to compare Cox' lines with only Qwest's Omaha MSA access lines to gain a true picture of the competitive landscape. Today, Qwest has***BEGIN CONFIDENTIAL*** [redacted] ***END CONFIDENTIAL***in the Omaha MSA. Thus, Cox today has many more access lines than Qwest in the MSA. Significantly, while Cox serves many more residential customers than Qwest, Cox has also made significant inroads in the business market. As of the end of 2008, Cox had over 43,000 business lines as compared to ***BEGIN CONFIDENTIAL*** [redacted] ***BEGIN CONFIDENTIAL***for Qwest in the Omaha MSA.

The following chart shows the trends in access lines in the Omaha MSA:

BEGIN CONFIDENTIAL

END CONFIDENTIAL

In addition, Cox is not the only major business competitor in Omaha. According to the Nebraska PSC report, as of December 2008 AT&T (via its TCG network) served 48,144 business

customers in Nebraska. It is clear that nearly all of these lines are in the Omaha MSA. Apparently, this competitor was not driven from the market.

In sum, despite the rhetoric of PAETEC/McLeod, the dire prediction of the death of competition in Omaha has simply not occurred, and Omaha is a more highly competitive market today than it was when forbearance was granted.

V. CONCLUSION

The comments elicited in this proceeding have done nothing to establish any basis for denial of Qwest's Petition for Forbearance in the Omaha MSA. If anything, the record presents an even stronger basis for the grant of the Petition. For the foregoing reasons, and those articulated in its Petition, and all the supporting documentation Qwest has filed, the Commission should grant Qwest's Petition for Forbearance.

Respectfully submitted,

QWEST CORPORATION

By: /s/ Harisha J. Bastiampillai
Craig J. Brown
Harisha J. Bastiampillai
Suite 950
607 14th Street, N.W.
Washington, DC 20005
(303) 383-6671
Craig.Brown@qwest.com
Harisha.Bastiampillai@qwest.com

Its Attorneys

October 21, 2009

EXHIBIT 1

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Petition of Qwest Corporation for Forbearance	)	WC Docket No. 09-135
Pursuant to 47 U.S.C. § 160(c) in the Phoenix	)	
Arizona Metropolitan Statistical Area	)	

DECLARATION OF TIMOTHY J. TARDIFF AND DENNIS L. WEISMAN IN SUPPORT OF THE REPLY COMMENTS OF QWEST COMMUNICATIONS

I. Introduction

1. My name is Timothy J. Tardiff. My business address is 11 Morton Street, Newton, MA 02459. I am an economic consultant in private practice. I have specialized in telecommunications policy issues for over 25 years. I received a B.S. degree from the California Institute of Technology in mathematics (with honors) in 1971 and a Ph.D. in Social Science from the University of California, Irvine in 1974. My research has included studies of the demand for telephone services, such as local measured service and toll; analysis of the market potential for new telecommunications products and services; assessment of the growing competition for telecommunications services; and evaluation of regulatory frameworks consistent with the growing competitive trends. I have published articles in the regulatory economics literature, which in recent years have focused on policies for the increasingly competitive telecommunications industry

2. I participated in numerous legal and regulatory proceedings on issues of telecommunications economics and regulation. Since the passage of the Telecommunications Act of 1996, I have participated in interconnection arbitrations, unbundled element proceedings, universal service investigations, applications by incumbent local exchange carriers for authorization to provide interLATA long-distance, and implementation of the Triennial Review Order rules for unbundling

network elements in over 25 states and before the Federal Communications Commission ("FCC"). My international research and consulting experience includes studies and expert reports on telecommunication competition and interconnection issues in Canada, Japan, New Zealand, Peru, Thailand, Australia, and Trinidad and Tobago. I attach a copy of my full resume as Exhibit 1.

3. My name is Dennis L. Weisman. I am employed by Kansas State University as a Professor of Economics. My business address is Department of Economics, Waters Hall, Kansas State University, Manhattan, Kansas 66506-4001. I received a B.A. in economics and mathematics from the University of Colorado; an M.A. in economics from the University of Colorado; and a Ph.D. in economics from the University of Florida with a specialization in industrial organization and regulation. I have testified in numerous regulatory proceedings to the economic and social impacts of regulatory policies and have served as an advisor to telecommunications firms, electric power companies and regulatory commissions on economic pricing principles, the design of incentive regulation plans and competition policies

4. My primary research interests are in strategic behavior and government regulation. I have authored or co-authored more than 85 articles, books and book chapters. My research has appeared in the Antitrust Bulletin, Economics Letters, the Journal of Regulatory Economics, the Yale Journal on Regulation, the Journal of Policy Analysis and Management, the Southern Economic Journal and the Federal Communications Law Journal. My research has also been cited by the U.S. Supreme Court in Verizon v. FCC, both majority and dissenting opinions. I am the co-author of Designing Incentive Regulation for The Telecommunications Industry, published by the MIT Press and the AEI Press in 1996, and The Telecommunications Act of 1996: The "Costs" of Managed Competition, published by Kluwer in 2000. I am also the author of Principles of Regulation and Competition Policy for the Telecommunications Industry - A Guide for Policymakers, published by The Center for Applied Economics at the University of Kansas, School of Business in 2006. I currently serve on the editorial boards of the Journal of Regulatory Economics,

Information Economics and Policy and The Review of Network Economics. I attach a copy of my full resume as Exhibit 2.

5. The primary purpose of this declaration is to evaluate from an economic perspective the comments of the parties opposing Qwest's petition for forbearance in the Phoenix, Arizona Metropolitan Statistical Area (MSA). Because the arguments proffered by these parties are generally similar to those offered by interests opposing regulatory reforms and/or deregulation in other contexts (e.g., state regulatory proceedings considering retail price deregulation), we have developed a set of economic principles intended to inform deliberations on whether to maintain current regulatory regimes or relax and/or eliminate such regimes as competitive forces intensify, which we attach as Exhibit 3.[1] We use these principles to frame our response to the economic arguments of opposing parties, which generally advocate an excessively narrow and time-limited assessment of the strength of competitive alternatives to Qwest's services in an attempt to encourage this Commission to continue to maintain extensive unbundling obligations, despite the competition that continues to grow, both in Phoenix and throughout the U.S.

6. The remainder of this declaration is organized as follows. We summarize the major economic arguments of the opposing parties in Section II. In Section III, we draw on our economic principles to explain why these arguments are economically incorrect. Section IV provides a brief summary and conclusion.

II. Summary of Opposing Economic Arguments

7. While differing somewhat in specific details, the comments of opposing parties in this proceeding[2] and the parallel remand proceeding[3] generally address the following common themes:[4]

---

[1] Dennis L. Weisman and Timothy J. Tardiff, "Principles of Competition and Regulation for the Design of Telecommunications Policy," October 2009 (Exhibit 3 to this declaration). .

[2] Opposition of Paetec Holding Corp. , Before the Federal Communications Commission, *In the Matter of Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area*, WC Docket No. 09-135, September 21, 2009 at 19-20 ("Paetec Opposition"); Opposition of Covad Communications Company; Alpheus Communications, L.P.; U.S. Telepacific Corp. and Mpower Communications Corp., both d/b/a Telepacific Communications; First

- In considering whether there is sufficient competition for incumbent's services, the opposing parties argue the product market should be defined narrowly. In particular, they argue that "intermodal" alternatives—in particular, wireless and voice over Internet protocol (VoIP) —should not be considered as competitive alternatives to incumbent services.[5] To a large

---

Communications, Inc.; Deltacom, Inc.; Trucom LLC d/b/a Citynet – Arizona; and TDS Metrocom, LLC , Before the Federal Communications Commission, *In the Matter of Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area*, WC Docket No. 09-135, September 21, 2009 at 19-20 ("Covad, et al. Opposition"); Initial Comments of Broadview Networks, Inc., Nuvox, and XO Communications, LLC, *In the Matter of Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area*, WC Docket No. 09-135, September 21, 2009 at 19-20 ("Broadview, et al. Opposition"); Cavalier Telephone, LLC Opposition to Qwest Petition for Forbearance , Before the Federal Communications Commission, *In the Matter of Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area*, WC Docket No. 09-135, September 21, 2009 at 19-20 ("Cavalier Opposition"); Comptel's Opposition to Qwest Petition for Forbearance , Before the Federal Communications Commission, *In the Matter of Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area*, WC Docket No. 09-135, September 21, 2009 at 19-20 ("Comptel Opposition"); and Opposition of Integra Telecom, Inc., TW Telecom, Inc., Cbeyond, Inc., and One Communications Corp., *In the Matter of Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area*, WC Docket No. 09-135, September 21, 2009 at 19-20 ("Integra, et al. Opposition").

[3] Comments of Paetec Holding Corp. , Before the Federal Communications Commission, *In the Matter of Petition of the Verizon Telephone Companies for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Boston, Philadelphia, Pittsburgh, Providence, and Virginia Beach Metropolitan Statistical Areas*, WC Docket No. 06-172, *In the Matter of Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Denver, Minneapolis-St. Paul, Phoenix, and Seattle Phoenix, Arizona Metropolitan Statistical Areas*, WC Docket No. 07-97, September 21, 2009 at 19-20 ("Paetec Remand Comments") and Comment of Covad Communications Company; Alpheus Communications, L.P.; U.S. Telepacific Corp. and Mpower Communications Corp., both d/b/a Telepacific Communications; First Communications, Inc.; Deltacom, Inc.; Trucom LLC d/b/a Citynet – Arizona; and TDS Metrocom, LLC , Before the Federal Communications Commission, *In the Matter of Petition of the Verizon Telephone Companies for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Boston, Philadelphia, Pittsburgh, Providence, and Virginia Beach Metropolitan Statistical Areas*, WC Docket No. 06-172, *In the Matter of Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Denver, Minneapolis-St. Paul, Phoenix, and Seattle Phoenix, Arizona Metropolitan Statistical Areas*, WC Docket No. 07-97, September 21, 2009 ("Covad, et al. Remand Comments").

[4] Apparently, none of the opposing parties have offered expert economic analysis specific to Qwest's Phoenix petition in this docket. Instead, they have referenced documents prepared for other proceedings and/or jurisdictions. In particular, Cavalier attached the Declaration of Michael D. Pelcovits in WC Dockets 08-24 and 08-49 (Verizon's Virginia Beach and Rhode Island Forbearance proceedings), Covad, et al. cited a California study (Trevor R. Roycroft, "Why 'Competition' is Failing to Protect Consumers-Full Report," The Utility Reform Network, March 25, 2009.), and Integra cited Kent W. Mikkelsen, "Mobile Wireless Service to 'Cut the Cord' Households in FCC Analysis of Wireline Competition," which was attached to a 2008 *ex parte* in an earlier Qwest forbearance docket While our comments do not directly address these documents, we have reviewed them and note that the analyses contained therein are generally the same as those that we describe and critique in these comments.

[5] Integra, et al. Opposition at 24-27; Paetec Opposition at 8-13; Paetec Remand Comments at 43-45; Covad, et al. Opposition at 8-13; Covad, et al. Remand Comments at 42-44; Cavalier Opposition.

extent, this position boils down to the proposition that the only legitimate substitutes for incumbent services are technological "clones" of the incumbent's offerings.[6]

- Having artificially narrowed the range of eligible alternatives, the opposing parties conclude that the resulting market structure is a duopoly.[7] And based on observations made in other contexts (e.g., in decisions weighing the merits of mergers that would reduce the number of competitors from three to two), advocates of this conclusion claim that such a market is not sufficiently competitive to warrant forbearance from regulation.

- Regardless of the strength of competition for retail services, opponents of Qwest's petition would only grant forbearance if a vibrant market for wholesale inputs were guaranteed after forbearance were granted.[8] In support of their position, proponents forthrightly acknowledge their objective of protecting companies whose business plans depend on the availability of such wholesale markets, with Unbundled Network Elements ("UNEs") available at low TELRIC-based rates.

- In determining whether forbearance is warranted, opposing parties argue that this Commission should employ a market power analysis similar to the approach U.S. competition authorities use to analyze the efficacy of proposed mergers.[9] In particular, this position would require a rigid and unrealistically high "market share"[10] (in an artificially narrow "market"),

---

[6] Such a position is similar to arguing that Toyota is a monopolist in the "market" for the Toyota Camry because no other carmaker produces that specific car. The key point here is that even though Toyota is the only maker of the Camry—just as Qwest may one of only a few providers of wired services—this does not establish the existence of market power for that particular product.

[7] Paetec Remand Comments at 6-9 and 12-19; Covad, et al. Remand Comments at 6-8 and 11-19..

[8] Comptel Opposition at 26-37; Broadview, et al. Opposition at 42-52; Covad, et al. Remand Comments at 8-11 and 41-42 ; Paetec Remand Comments at 9-12 and 42-43. .

[9] Paetec Remand Comments at 40-41; Covad, et al. Remand Comments at 39-41; Broadview, et al. Opposition at 17-18; Integra, et al. Opposition at 9..

[10] In particular, these parties would require two additional wireline carriers (Paetec Remand Comments at 29; Covad, et al. Remand Comments at 28; Integra, et al. Opposition at 9). Integra also proposes that each such carrier (1) be capable of serving at least 75 percent of the market and (2) that each such carrier have a current market share of at least 15 percent.

based primarily on *current* customer volumes,[11] rather the *potential* for serving customers that available capacities in competing networks could accommodate. The FCC has clearly articulated that the objectives and analysis used to determine whether unbundled network elements should be mandated at regulated prices (impairment) differs from a standard market power analysis.[12] Accordingly, the opposing parties' position would represent a major departure from the current objectives and processes for establishing and maintaining mandatory access to unbundled network elements.

III. Economic Evaluation of Opposing Economic Arguments

8. In this section, we apply the principles developed and discussed in Exhibit 3 to each of the major components of opposing parties' forbearance recommendations.

A. Intermodal Alternatives Should be Considered in Forbearance Determinations

9. As we observed in our discussion of Principle 10: "Policymakers have recognized that (i) subscription to both wireless and wireline does not imply that the two services are complements, and (ii) wireless provides competitive discipline on wireline prices." This growing trend in domestic and international markets (for example, under Canadian regulations, unaffiliated wireless providers have been considered in decisions to forbear from retail price regulation of incumbents' services in geographic areas that account for substantial majorities of residential and business lines) is also consistent with the steady increase in the proportion of households that rely exclusively (or almost exclusively) on wireless service. Indeed, the most recent national statistics reveal a one-year increase in such households from approximately

[11] Paetec Opposition at 23-25; Paetec Remand Comments at 33; Covad, et al. Opposition at 23-25; Covad, et al. Remand Comments at 32-33.

[12] Federal Communications Commission, *In the Matter of Unbundled Access to Network Elements, Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, WC Docket No. 04-313, CC Docket No. 01-338, Order On Remand, Released February 4, 2005 at ¶ 109 ("TRRO").

29% to 35%.[13] When growing numbers of customers are availing themselves of such intermodal alternatives (including the services provided by traditional cable companies), continuing asymmetric regulation of incumbent providers would distort the competitive process to the detriment of dynamic efficiency gains (Principle 1: "The optimal regulatory policy should recognize the tradeoffs between static and dynamic efficiency and its implications for consumer welfare.") and ultimately consumer welfare. The Commission followed this "static" approach in transitioning to competition the long-distance markets and ultimately concluded that consumers likely paid higher prices as a result.

B. The Markets in which Incumbents such as Qwest Compete Are Not Duopolies

10. First and foremost, opponents' assertions of duopoly markets are the result of "legislating" legitimate economic substitutes out of the analysis. In short, the "duopoly" label mischaracterizes the nature of competition and any conclusions drawn from such incorrect premises are patently incorrect as a matter of logic. That is, to the extent that measures such as the number of competitors and/or market shares are used to make inferences about market power, refusing to include viable economic alternatives will result in faulty conclusions that such markets are unduly concentrated.[14]

11. Even if (contrary to fact) these telecommunications markets were duopolies, it does not necessarily follow that continued regulation is warranted. As we discuss under Principle 2 ("The optimal regulatory policy should balance Type I errors (regulating when market forces provide sufficient competitive discipline) and type II errors (not

---

[13]. Stephen J. Blumberg and Julian V. Luke, "Early Release of Estimates From the National Health Interview Survey (NHIS), July –December 2008," Division of Health Interview Statistics, National Center for Health Statistics, May 2009 and Stephen J. Blumberg and Julian V. Luke, "Early Release of Estimates From the National Health Interview Survey (NHIS), July –December 2007," Division of Health Interview Statistics, National Center for Health Statistics, May 2008.

[14] In the Omaha forbearance order, this Commission rejected the characterization of the market as a duopoly, based on the continued actual and potential competition from competitors that avail themselves of inputs provided by the Telecommunications Act that are still available after forbearance is granted. Memorandum Report and Order, *Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Omaha Metropolitan Statistical Area*, WC Docket No. 04-223, Memorandum Opinion and Order, Released December 2, 2005, ¶ 71 ("Omaha Forbearance Order")

regulating when market forces provide insufficient competitive discipline) so as to minimize the expected social cost of error."), the fundamental issue is not whether competition is likely to approach perfection, but whether the costs of continuing regulation (primarily the attenuation of investment incentives) outweigh the costs of premature forbearance. And in making such an assessment, it is important to account for the possibility that any apparent lack of competition may be an artifact of historical regulatory distortions, rather than the fundamental competitive structure of the markets at issue (Principle 5: "Any dearth of competition in retail telecommunications markets is likely an artifact of regulatory-rate distortions that served to suppress competition.")

12. Opponents quote various regulatory and competition authorities in other contexts as support for the proposition that duopoly markets are not sufficiently competitive. Again, the critical question is not whether more competition now is better than less (everything else being the same), but whether continued regulation is superior to relaxed regulation in conferring dynamic and static efficiency benefits on consumers. Indeed, in the case of mergers, while merger authorities may be inclined to deny a merger that results in a duopoly (or require divestiture of those geographic markets that would become duopolies), it is also the case that society does not routinely impose price (or other forms of) regulation on markets that are highly concentrated by conventional standards. What this suggests is a bit of introspection on the part of the Commission into the question as to whether regulation is the solution or the problem.

13. Perhaps the most germane example was this Commission's sequence of decisions to first eliminate the requirement that incumbents share subscriber lines with competing digital subscriber line (DSL) providers in 2003 and its 2005 decision (with intervention from the Courts) to end the obligation of incumbent telecommunications providers to share wholesale elements used in the provision of broadband services.[15]

---

[15] Federal Communications Commission, *In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, CC Docket No. 01-338, Report and Order and Order On Remand and Further Notice of Proposed Rulemaking ("TRO"), Released August 21, 2003, ¶ 199. Federal Communications Commission, *In the Matter of Appropriate Framework for Broadband Access to Internet over Wireline Facilities*, CC Docket No. 02-33, Report and Order and Notice of Proposed Rulemaking, Released September 23, 2005

At the time of those decisions, provision of broadband access was effectively a duopoly consisting of cable modem and incumbent DSL offerings.[16] And contrary to the suggestions of the opposing parties that consumers are necessarily harmed when regulatory restrictions in duopoly markets are eased, analysis of subsequent market developments resulted in the conclusion that "[t]he evidence in U.S. broadband markets suggests that efficiency gains from deregulation."[17]

C. The Continued Existence of a Wholesale Market should not be a Prerequisite for Forbearance

14. As we describe in Exhibit 3, wholesale markets are relevant to the implementation of the 1996 Telecommunications Act only insofar as they are required for competition in retail markets (Principle 9). The fundamental reason for our conclusion lies in Principle 3: "The optimal regulatory policy should be platform-neutral and competitor-neutral in that it should serve to protect the integrity of the competitive process rather than individual competitors." In other words, as the FCC's impairment standard[18] (and competition law and sound economics, in general) recognizes, telecommunications policies should facilitate competition on the merits among efficient competitors, and not favor or handicap particular firms employing specific technologies and business models.

15. The corollary to these principles is that if efficient retail competition is possible without particular (or any) wholesale elements, then mandating the unbundling of such elements at regulatory prescribed rates would be counterproductive to the competitive process. Indeed, in its decisions not to require incumbents to provide (1) unbundled network elements at regulated prices to wireless and long-distance companies; or (2) unbundled local switching at regulated rates, the Commission recognized that retail competition had proceeded (or was likely to proceed) absent

[16] Subsequently, wireless broadband services have achieved substantial shares of customers, so that the market structure is generally no longer a duopoly.
[17] Thomas W. Hazlett and Anil Caliskan, "Natural Experiments in U.S. Broadband Regulation," *Review of Network Economics*, Vol. 7, Issue 4, December 2008, pp. 460-480.
[18] TRRO, ¶ 21-22.

heavy-handed regulation of certain parts of wholesale "markets."[19] There is no credible evidence on the record to suggest that the Commission's decisions in this regard were in error.

D. Standard Market Power Analyses are not a Proper Basis for Determining whether Forbearance is Warranted

16. Opposing parties' recommendation of standard market power analyses to determine whether forbearance is warranted is fundamentally flawed for a number of reasons. First, despite the fact that facilities-based competition has strengthened considerably in recent years, thus rendering dynamic efficiency relatively more important, a market power focus would tilt the balance away from a proper weighing of dynamic versus static efficiency (Principle 1). In particular, this Commission recently reported that between mid-2005 and mid-2008, while incumbents' subscriber lines in Arizona have decreased by over 16%, facilities-based wireline competitors' lines (CLEC-owned) increased by about 51% . And over the same time period, the number of wireless subscribers in Arizona increased by 39 percent. Indeed, the number of Arizona wireless subscribers now exceeds the number of wired lines (incumbents and competitors) by 61 percent.[20] Paradoxically, the more consumers demonstrate through their consumption behavior that wireless and wireline are substitutes, the louder the pronouncements of the opposing parties that they are not.

17. Significantly, in establishing its impairment standard, this Commission clearly distinguished between an impairment analysis (a policy to facilitate competition by efficient providers) and a market power analysis (whether competition is sufficient to ensure just and reasonable rates). The Commission's previous determination is summarized in Principle 8: "The purpose of mandatory unbundling is not to control market power *per se*, but rather to enable competition that would not be possible

[19] TRO, ¶ 34.

[20] *Local Telephone Competition: Status as of June 30, 2008*; Industry Analysis and Technology Division, Wireline Competition Bureau, July 2009, Tables 9, 10. 11, and 14 and *Local Telephone Competition: Status as of June 30, 2005*; Industry Analysis and Technology Division, Wireline Competition Bureau, April 2006, Table 11. Nationally, from mid-2005 to mid-2008, incumbent subscriber lines decreased by 13 percent, facilities-based CLEC lines increased by 44 percent, and wireless subscribers increased by 33 percent—to a point where wireless subscribers exceed the number of wired lines by 65 percent.

otherwise." An impairment standard based on this rationale is economically sensible primarily because given the technological, competitive, and economic characteristics of the industry, it strikes a better balance between dynamic and static efficiency than would a market power standard.[21] In particular, while "passing" a standard market power assessment would be sufficient to conclude that efficient competition can proceed without mandatory unbundling, it is hardly necessary for such a stringent standard to be met before it is safe to conclude that efficient competition is feasible.

18. Of course, the opposing parties' recommendation that "intermodal" alternatives not be considered would put a finger on the static efficiency side of the scale to an even greater extent. Further, even if all economically relevant competitors were included in a standard market power analysis, there are several reasons why such an analysis would be overly restrictive when applied to the telecommunications industry. In particular, conventional market share and concentration metrics for determining market power can be especially misleading when (1) the industry was pervasively regulated prior to the onset of competition, (2) regulation served to peg certain prices to sub-competitive levels, and (3) the industry has a cost structure with a high proportion of fixed and/or sunk costs. For example, the *Merger Guidelines'* standard discussed by some opposing parties[22] that a market with fewer than five equal-sized competitors is "highly concentrated" would almost inevitably lead to erroneous conclusions about market power and whether deregulatory measures such as forbearance were justified. Indeed, as we describe in Exhibit3 (pp. 23-24), this Commission acknowledged the shortcomings of such standards when it evaluated competition in wireless markets.

19. When industries have been regulated, the consideration of market shares (and associated concentration measures, such as Herfindahl-Hirschman Indices (HHI)), which are essentially static and backward looking, can lead to erroneous conclusions about market power. (Principle 4: "Market share tests are inherently problematic in

[21] While the Commission's impairment standard is based on sound theoretical reasoning, its implementation (based on counts of incumbent's business lines and collocations) may not accurately measure the amount of actual or potential competition arising from facilities-based providers.
[22] See, for example, Covad, et al. Remand Comments at 30.

regulated industries and the Commission should not rely upon them to draw inferences about market power"). As one of the classic articles on market power long ago observed:

> In view of the growing importance of antitrust enforcement in regulated industries, we shall note briefly the significant limitations of our formal analysis when applied to a market in which rates are regulated by a government agency. To the extent that regulation is effective, its effect is to sever market power from market share and thus render our analysis inapplicable...
>
> For example, in many regulated industries firms are compelled to charge uniform prices in different product or geographical markets despite the different costs of serving the markets. As a result, price may be above marginal cost in some markets and below marginal cost in others. In the latter group of markets, the regulated firm is apt to have 100% market share. The reason is not that it has market power but that the market is so unattractive to other sellers that the only firm that will serve it is one that is either forbidden by regulatory fiat to leave the market or that is induced to remain in it by the opportunity to recoup its losses in other markets, where the policy of uniform pricing yields revenues in excess of costs. In these circumstances, a 100% market share is a symptom of a lack, rather than the possession, of market power. (footnotes omitted) [23]

20. Landes and Posner's cogent analysis also informs our closely related Principle 6: "Historical ratemaking polices in telecommunications that diverge from the competitive standard can lead regulators astray in applying standard market definition guidelines." In short, standard market share and concentration measures may reveal little or nothing about the competitiveness of a regulated industry, in general, and telecommunications, in particular. This observation notwithstanding, we note that to the extent that a market share measure is used to infer market power, Landes and Posner's analysis recommends the use of capacities, rather than current customer volumes in calculating such shares. Consider, for example, a particular market in which the ILEC and a cable company compete. Suppose the cable company quickly garners 5 percent of the customers and the ILEC files for deregulation. There may be a tendency to conclude that the ILEC continues to maintain market power since it has

[23] William W. Landes and Richard A. Posner, "Market Power in Antitrust Cases." *Harvard Law Review*, Volume 94, Number 5, March 1981, p. 975- 976.

95 percent of the customers. And yet, if capacity is truly the relevant measure of market share, and both the ILEC and the cable company are able to address 100 percent of the customers, the ILEC's market share is actually only 48.72 percent (95/(95 + 100)).

21. As this hypothetical example demonstrates, a capacity measure reflects the ability of competitors to expand and take on greater volume if a rival attempted unilaterally to increase prices above a competitive level, e.g., it is indicative of relatively high supply elasticity. As such, capacity measures the *potential* volume rivals are capable of serving, rather than their current actual volume. Thus, sound economic analysis supports the weight that this Commission has given to potential competition in earlier forbearance determinations.[24]

22. Finally, more recent economic analysis has demonstrated that the cost characteristics of facilities-based telecommunications firms can serve to constrain prices, even at conventionally high levels of market share and market concentration. And this tendency is reinforced when competing firms offer an increasing array of complementary services as is the case in telecommunications. The reasoning is straightforward. When a firm's cost structure has high levels of costs that do not vary with volume, the prices it charges must be well above incremental (marginal) cost in order to recover all of its costs. Therefore, even a modest loss in sales can result in sufficient erosion of profits to make an attempted price increase uneconomic. And if revenues from complementary high-margin services are also lost when a customer chooses another provider (for example, revenues from services such as calling features and voice mail), the loss of even fewer customers as a result of an attempted price increase would render that decision uneconomic. , Thus, the cost structure characteristic of facilities-based telecommunications firms result in the general proposition that a little competition can go a long way. These observations are the basis for Principle 7: "The cost structure for wireline providers (i.e., pronounced

[24] For example, in its 1995 decision to classify legacy AT&T as nondominant in the provision of long-distance services, this Commission examined the capacity of competing carriers to expand in its analysis of supply elasticity. In the Matter of Motion of AT&T to be Reclassified as a Non-Dominant Carrier, FCC 95-427, *Order*, October 23, 1995. Similarly, in its Omaha forbearance order, the Commission considered actual and potential competition from both Cox and other providers. Omaha Forbearanee Order. ¶ 62.

scale/scope economies) and the corresponding high price-cost margins required for financial viability implies that relatively modest levels of competition may be sufficient to impose the requisite pricing discipline." In other words, the phrase that "competition occurs at the margin" means that it is the marginal customers, those willing to substitute alternative services in the face of a price increase, that serve to impose pricing discipline on the market provider.[25] This observation has special significance for wireline providers because it implies that a relatively small percentage of customers (the "marginal customers") willing to discontinue service or switch to alternative service providers in the face of a price increase are sufficient to provide the requisite competitive discipline.

23. Therefore, to the extent that static measures such as market share/concentration are considered in forbearance determinations, particular benchmarks that might inform other decisions, are not likely to provide credible information about the competiveness of telecommunications markets. For example, our analysis supports the [Canadian] government's determination that a large proportion of Canadian retail services no longer require price regulation, even though incumbents maintained market shares on the order of 80 percent when such determinations were made. On the other hand, in other industries, blocking a merger that would increase the share of the largest firm to 80 percent may also make economic sense because the industry's cost structure may not be conducive to the same price-constraining pressures that are present in the telecommunications industry. Furthermore, dynamic efficiency considerations must, of necessity, be given primacy in the Commission's deliberations even though such weight may not be appropriate in typical merger cases.

IV. Conclusion

24. The opposing parties in this proceeding engage in a number of tactics that are specifically designed to understate the degree of competition for telecommunications

[25] See, for example, Jerry A. Hausman., "Regulated Costs and Prices in Telecommunications," in Gary Madden (ed.), *International Handbook of Telecommunications Economics, Volume 2: Emerging Telecommunications Networks*, 2003, p. 226.

services in Phoenix and other market areas throughout the United States. These tactics include, but are not limited to, (1) strategic use of market definition guidelines to narrowly define the market for the purpose of overstating market power; (2) creating the fiction of a duopoly by ignoring the facts and simply declaring that wireless is not in the same product market as wireline; (3) supporting protectionist regulatory policies that confuse protecting the integrity of the competitive process the with protection of individual competitors; and (4) conflating the objective of fostering competition in the 1996 Telecommunications Act with a separate objective of fostering competition in wholesale markets.

25. We have relied upon our economic principles to rebut the positions of these opposing parties and expose the fallacies in their arguments. In addition, historical experience in transitioning telecommunications markets towards competition is also noteworthy in two respects. First, the opposing parties advocate the same type of protectionist policies that accompanied the transition to competition in long distance markets. The overwhelming weight of the evidence is that those policies, which relied heavily on asymmetric regulation of the incumbent provider, AT&T, did not serve consumers well. The high social costs of those policies include not only prices that were higher than would otherwise have been the case, but also products and services that did not find their way to market, but would have otherwise. Second, the opposing parties in this proceeding advocate a rigid interpretation of actual market share and market concentration metrics that this Commission has previously rejected (e.g., in evaluating the competiveness of wireless markets)[26] in situations in which they did not serve to credibly inform the record.

[26] See, for example, In the Matter of Applications of AT&T Wireless, Inc. and Cingular Wireless Corporation for Consent to Transfer Control of Licenses and Authorizations, etc, WT Docket Nos. 04-70, 04-254, and 04-323, *Memorandum Opinion and Order*, October 26, 2004, ¶ 148.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on October 20, 2009

Dr. Timothy J. Tardiff, Declarant

INVITED PRESENTATIONS (CONTINUED):

"Cross-Subsidization and Price Predation in Public Enterprise;" and "Incentive Regulation: Theory and Practice." Southeastern Regional Business and Economics Utilities Conference, Atlanta, Georgia, September 1991.

"Post-Divestiture Pricing Trends In The Telecommunications Industry." Divestiture: Five Years Later. Conference sponsored by the Center for Telecommunications and Information Studies at Columbia University, Washington, D.C., March 1989.

"The Impact of Telecommunications Regulation On The Economic Incentives of Private Network Deployment." National Communications Forum, Chicago, Illinois, October 1988.

"Protecting The Right To Be Served By Regulated Utilities Subject To Competition: A Critical Assessment." 11th World Engineering Congress, Atlanta, Georgia, October 1988.

"Default Capacity Tariffs: Smoothing The Transitional Regulatory Asymmetries In The Telecommunications Marketplace." Fifteenth Annual Telecommunications Policy Research Conference, Airlie, Virginia, November 1987.

"Traffic Sensitive Costs, Bypass and Pricing For Carrier of Last Resort." Bell Communications Research Conference on Traffic Sensitive Cost Recovery. Seattle, Washington, July 1986.

"Forecasting Bypass Adoption In Telecommunications." National Forecasting Conference, Denver, Colorado, June 1985.

"A General Theory of Point-to-Point Long Distance Demand." Bell Communications Research Business Research Conference, Durango, Colorado, October 1984.

HONORS, AWARDS, AND GRANTS:

2008	MBA Student's Professor of the Semester (First Time Award Presented to a Faculty Member Outside the College of Business Administration)
2004 – 2005	Center for Applied Economics Grant (Principal Investigator)
2004	Edgar S. Bagley Research Award
2001	Edgar S. Bagley Research Award